Substance Related Disorders

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Psychoactive Substance Use
OPIODS

- 600,000 addicts in the U.S.
- Route of administration:
  - oral
  - smoked
  - nasal inhalation
  - IV or SC ingestion
- Dosage easy to underestimate

Substance Use in the General Population (Use more than once before age 25)

- Alcohol - 95%
- Marijuana - 64%
- Cocaine - 28%
- Hallucinogens - 20%

OPIODS

- **Intoxication Symptoms**
  - drowsiness
  - respiratory depression
  - euphoria
  - pupillary constriction
- **Withdrawal Symptoms**
  - nausea/vomiting
  - sweating
  - pupillary dilation
  - piloerection

Opiod Overdose

- IV Narcan
  - .4mg IV
  - may repeat 4-5 times in first 30-45 minutes
- Consider Polyoverdose

STIMULANTS
(Cocaine, Amphetamines)

- Extremely addicting
- Route of administration:
  - oral
  - smoking/snorting
  - IV
- Binge use

STIMULANT INTOXICATION

- restlessness
- pressured speech
- paranoid ideation/delusion
- increased pulse/BP
- pupillary dilation
- tactile/olfactory hallucinations

STIMULANT WITHDRAWAL

- “CRASH”
- lethargy
- prolonged sleep
- craving
- depression (1-2 months)

HALLUCINOGENS

- Most Commonly:
  - eaten
  - sucked off paper
  - smoked

HALLUCINOGEN INTOXICATION

- ANXIETY/DEPRESSION
- depersonalization
- hallucinations/illusions
- sweating/tremors
- palpitations

HALLUCINOGEN WITHDRAWAL

- PANIC REACTION
- Treatment:
  - reassurance
  - secure environment
  - benzodiazepines/antipsychotics

ALCOHOL

- 50% of males between ages 18 and 25 will have one ETOH-related incident
- 10 million alcoholics in the US
- 10% of drinking population consumes 50% of all alcohol
- male:female prevalence is 4:1

ALCOHOL (cont.)

- 35+% of all suicides are ETOH-related
- 41% of all traffic fatalities are “ “
- 20% of all ER visits are ETOH-related
- AA attendance gives 50% better chance for one year sobriety
- successful *controlled drinking* no longer a valid concept

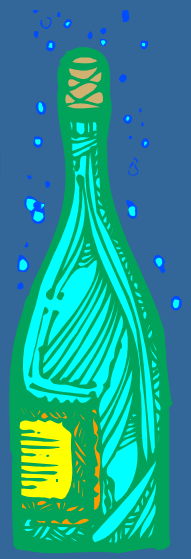
ALCOHOL (cont.)

- 1 in 10 deaths in the United States is alcohol-related
- 20-25% of all hospital inpatients are alcoholic
- conservative estimate is 1 in 10 ambulatory patients is alcoholic

ALCOHOL'S EFFECTS

- 4 drinks in a 2-hour period raises the BAL to *AT LEAST* 0.08 (DUI cutoff)
- BAL of 0.05 affects judgment and fine motor activity
- acute and 8 hour effects of 0.08 BAL in simulator performance
- rule of thumb - metabolize 0.015/h (up to 0.025/h in a heavy drinker)

Relationship of #DUIs to diagnosis of alcoholism



- 1st - 75%
- 2nd - 90%
- 3rd - 100%

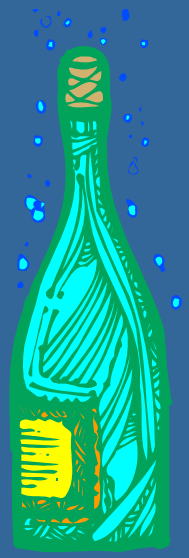
ALCOHOL'S EFFECTS (cont.)

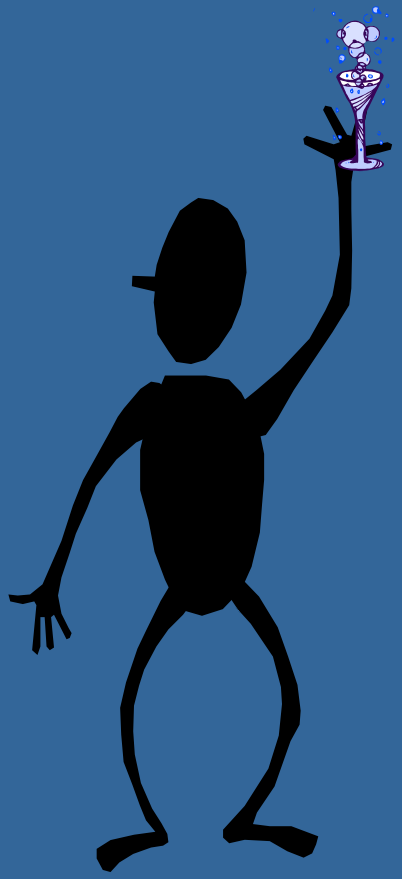
- disinhibition
- regression
- impulsivity
- grandiosity
- decreased frustration tolerance
- passivity

DSM-IV Diagnosis of *Substance Abuse*

A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following, occurring within a 12-month period:

“I drink, I get drunk,
I fall down, -
no problem!”





DSM-IV Diagnosis of *Substance Abuse (cont.)*

- Recurrent substance use ***resulting in a failure to fulfill major role obligations***
- Recurrent substance use in situations where it is ***physically hazardous***
- Recurrent substance-related ***legal problems***
- ***continued substance use despite*** having persistent or recurrent social or interpersonal ***problems*** caused by or worsened by the effects of the substance

DSM-IV CRITERIA *SUBSTANCE DEPENDENCE*

- **A maladaptive pattern of use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at any time in the same 12-month period:**

Substance Dependence (cont.)

1. ***tolerance*** (needing more to achieve intoxication or desired effect, or diminished effect with continued use of same amount)
2. ***withdrawal***
3. often uses ***more than intended***
4. persistent desire or unsuccessful attempts to ***cut down or control*** use
5. great deal of time ***getting/using/recovery***
6. important activities given up or reduced because of using
7. continued use ***despite problems***

Alcohol Dependence Diagnosis

- The diagnosis requires skillful interviewing and careful analysis of data
- TWO CARDINAL FEATURES:
  - ***DENIAL***
    - EVIDENCE OF INABILITY TO CONTROL DRINKING

Breaking Through Denial

- ***CONFRONTATION***
- ***SHOWING EMPATHY***
- ***OFFERING HOPE***

CAGE TEST

C - Concern for drinking/attempts to **C**ut down

A - Annoyed at advice/comments

G - Guilt over use/behavior while using

E -"Eye openers"

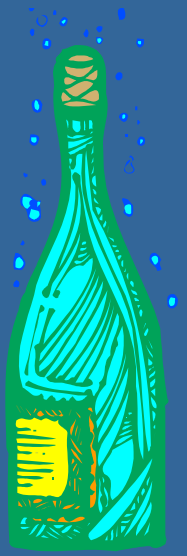
RISK FACTORS IN SUBSTANCE ABUSE

- **FAMILY HISTORY** (sons of alcoholic fathers)
- **AXIS I** Psychiatric Disorders (manic depressive disorder)
- **AXIS II** Personality Disorders/Traits (antisocial, borderline, avoidant)

THE ENABLING HEALTH CARE PROVIDER

- Failure to diagnose alcoholism
- failure to treat alcoholism as a primary disease
- treating the alcoholic with sedatives or tranquilizers
- treating the co-alcoholic with sedatives or tranquilizers

Alcohol and the Aviator



NATOPS 3710.7

Any form of alcohol intake within 12 hours prior to flight planning is prohibited. Flight crews shall ensure that they are free of hangover effect prior to flight. Detectable blood alcohol or symptomatic hangover is cause for grounding of

BUMED INST 5300.8
ALCOHOL ABUSE/DEPENDENCE

- ***Ground immediately!***
- ***NPQ and AA*** all aviation duty
- Submit grounding PE
- FS tasked with diagnosis and referral to treatment (must be at least **Outpatient** - not IMPACT)

BUMEDINST 5300.8 (cont.)

Waiver request based on FS assessment of:

- Positive attitude and ***UNQUALIFIED ACKNOWLEDGMENT*** of diagnosis
- Successful completion of program and favorable prognosis
- ***ABSTINENCE !!!!***
- ***Documented*** AA

BUMEDINST 5300.8 (cont.)

Return to flight status/aviation related duty:

- **Normally 90 days after successful treatment**
- **No sooner than 30 days (<90 *only* if absolutely mission-essential**
- **FS can extend to 12 months**
- **Service Group limitations not specified**

(Former) NAVY ALCOHOL TREATMENT PROGRAM

LEVEL I: PREVENT

LEVEL II: CAAC - 2-3 week structured program for substance abuse

LEVEL III: ARS/ARC - 4-6 week inpatient program for substance dependence

New Navy Alcohol Treatment

- **Level 0.5** - IMPACT
- **Level I - (Outpatient - OP)** - meets criteria for ETOH Abuse
- **Level II - (IOP)** - meets criteria for ETOH Dependence
- **Level III** - Dormitory (when 24h tx needed
- **Level IV** - Medical risk of withdrawal
- **Continuing Care** - the basis of relapse prevention and recovery

New Navy Alcohol Treatment (cont.)

- **IOP lasts 1-2 weeks (assignment to OP or IOP based on intake)**
- **Philosophy of treatment**:
  - pts must learn a program of self-management, to cope with sobriety/responsible consumption, emotional stress, and/or physical cravings associated with alcohol
  - this includes a new social network and knowledge to develop alternatives to and derive pleasure from substance -free activities.

The Goal of Successful Treatment

- ***ABSTINENCE:*** when a program is adhered to for 3 years there is a 70% recovery rate
- NEVER support ***"controlled drinking"*** as a goal for an alcoholic

BUMEDINST 5300.8 (cont.)

Waiver Package

- SF 88/93/NAVMED 612012
- PSYCHIATRIC EVALUATION
  - initially
  - annually in aftercare
- Internal medicine eval “as indicated”
- Copy of Level II/III/IOP Treatment Summary (1st time only)
- CO’s endorsement

BUMEDINST 5300.8 (cont.)

Waiver Package

- **FS NARRATIVE** addressing:
  - work performance
  - peer relationships
  - family/marital/SO/relationships
  - psychosocial stressors
  - attitude towards recovery
  - abstinence
  - AA attendance
  - MSE
- DAPA's statement to document aftercare

BUMEDINST 5300.8 (cont.)

Interval for Flight PEs

- Upon completion of treatment with waiver submission
- Annually thereafter

BUMEDINST 5350.8 (cont.)

Aftercare Requirements

- **FS visit:** monthly (1st year), quarterly (2nd and 3rd years)
- **DAPA visits:**
  - monthly for 3 years
  - documented AA
- **AA** (or other organized recovery program*)
  - 3x/week for 1st year
  - 4x/month thereafter

* ***not recommended***

Relapse

- Command ***MUST*** submit request for revocation of waiver
- We will consider (case-by-case) if a second waiver will be recommended - usually don’t even consider submission for 12 months after re-eval, retreatment, and aftercare back at beginning
- Severity of relapse and evidence of recovery governs decisions

Predictors of Good Future Capability *(useful for special evals)*

- no family history of substance abuse or mental illness
- lack of disciplinary/legal problems
- no personal psychiatric history
- positive life goals and plans
- one year of abstinence

Comparison of Service/FAA Alcohol Policies

- None distinguish abuse from dependence
- ***Minimum*** down time:
  - USA: 6 months
  - USAF: 60 days
  - USN: 30 days
  - FAA: 90 days
- ***All require total abstinence***
- Aftercare emphasis - USN and FAA only

SUMMARY

- USN still most liberal in return to flying
- Substance Abuse/Dependency is not a disease of ***"spontaneous insight"***
- Physicians must be better educated
- Alcohol use is not a "right" - like flying, it is lost when it is abused

Visiting Professional Program

In past all FSs went en route to their first duty station as a flight surgeon.

No current mechanism formally ($)

If you have not had this experience during internship/residency/life please request to attend the four-day program on base at the ATC or as soon as possible at your duty station